

REMARKS/ARGUMENTS

Examination and allowance of pending Claims 1-3 are respectfully requested.

Claim 1 has been amended.

The Examiner objected to the drawings under 37 CFR § 1.83(a) as not showing every feature of the invention specified in the claims. Specifically, the Examiner stated that the male luer fittings, female luer fittings, flange fittings, flangeless fittings, threaded fittings, barbed fittings must be shown or the feature(s) cancelled from the claim(s).

Applicant has cancelled the recited elements (male luer fittings, female luer fittings, flanged fittings, flangeless fittings, threaded fittings and barbed fittings) from base Claim 1. Accordingly, Applicant believes the drawings filed on 18 November 2003 are in compliance with 37 CFR § 1.83(a) and no amended replacement sheets are required in reply to the Office action to avoid abandonment of the application.

Claims 1 and 2 are rejected under 35 U.S.C. § 102(b) as being anticipated by USP 5,922,604 (Stapleton et al.), hereinafter Stapleton.

Stapleton neither describes nor suggests ... a hybridization chamber having a generally planar substrate including a specimen area containing at least one biomolecule; and a frame surrounding at least a portion of the specimen area, the frame defining walls of a well for containing a fluid when the frame is in contact with the substrate, *the frame including a connector to connect to tubing* for supplying fluids to the well, wherein the

connector is integrally formed with said frame and said frame is self-adhering to said substrate ... as recited in Applicant's newly amended base Claim 1 (emphasis added).

Stapleton discloses thin reaction chambers for containing and handling liquid microvolumes. Applicant contends that there is no "connector adapted in the frame to connect to tubing for supplying fluids to the well" found anywhere in Stapleton's invention. Instead, it seems that Stapleton teaches away from connectors as Stapleton states, "the liquid receiving area 18 and entry port 20 would be positioned ... to enable liquid to fill the chamber 16 ... without physical contact between the liquid dispenser and the chamber 16." (See Stapleton, column 6, lines 6 – 13). Stapleton additionally states that "liquid droplets from a dispensing tip ... will not overflow the liquid receiving area 18 ... the importance of non-contact dispensing is the elimination of changing or washing and ... cost of disposable tips." (See Stapleton, column 6, line 64-67 to Column 7, lines 1-6).

The Examiner states that Stapleton's liquid receiving area 18 and exit port 30 represent two connectors integrally formed with the frame. Applicant fails to see how area 18, port 30 equate to connectors 62 and 64 as shown, for instance, in Applicant's FIG. 10 which are "connect to tubing" as set forth in Applicant's Claim 1. There is no suggestion or motivation in Stapleton to provide connectors to connect to tubing for supplying fluids to the well, and further no motivation or suggestion to provide tubing as a means to do so. The Examiner considers the Stapleton frame with area 18 and port 30

to be flangeless fittings. Applicants argue that flangeless fittings typically include matching components that fit together, e.g. a nut and a ferrule, for use with a tubing, for which there is no description or suggestion in Stapleton.

Accordingly, Applicant argues that each and every feature of the claim as arranged in the Applicant's Claim 1 is not taught or disclosed by the cited prior art reference and hence a *prima facie* case of anticipation has not been made. For that reason, Applicant's base Claim 1, and hence dependent Claims 2, are patentably distinct over the Stapleton reference under 35 U.S.C. § 102(b) and the rejection should be removed.

Claims 1-3 are rejected under 35 U.S.C. § 102(e) as being anticipated by USP 6,258,593 B1 (Schembri et al.), hereinafter Schembri.

Schembri neither describes nor suggests ... a hybridization chamber having a generally planar substrate including a specimen area containing at least one biomolecule ... and a frame surrounding at least a portion of the specimen area, the frame defining walls of a well for containing a fluid when the frame is in contact with the substrate, *the frame including a connector to connect to tubing* for supplying fluids to the well, wherein the connector is integrally formed with said frame and said frame is *self-adhering to said substrate* ... as recited in Applicant's newly amended base Claim 1 (emphasis added).

Schembri discloses an apparatus for conducting chemical or biochemical reactions on a solid surface within an enclosed chamber. Referring to the Schembri disclosure, Applicant contends that in order for Schembri to form a good substrate (2)-to-cover (3) seal, a pressure-producing means is required to generate compression of the lip 8 on to the substrate 3. The pressure-producing means requires a housing 5, a base 1 and screws 13. (See Schembri, FIG. 1, Column 10, lines 61-67 to Column 11, lines 1-19).

Additionally Schembri states: "Application of pressure to the outer face of cover 3 is required to form the seal between the lip 8 and the substrate 2. Such pressure may be applied by clamps...by placing gasket 4 between the covers 3 and 3' and housing 5, the housing 5 being held by screws 13 ... and screwed into threaded holes 7." (See Schembri at Column 11, lines 38-49). On the contrary, Applicant's Claim 1 recites, "frame is self-adhering to substrate" which Applicant contends is not taught or suggested by Schembri's specification. Schembri requires external means for adherence.

The Examiner states "that the Schembri cover is equipped with connectors 12, 12', which connect to access ports 10, 10', for providing fluid inflow and outflow where the connectors 12, 12' are considered to be male luer or flanged fittings". Applicant fails to see how septum guides 12 and 12' in Schembri's specification can be considered as a "connector to connect to tubing for supplying fluids to the well" as recited in Applicant's Claim 1. Instead, Applicant contends that Schembri effectively teaches

away from connectors as Schembri states, "Access to ports 10 and 10' is via septa 11 and 11' placed in a septum guides 12 and 12'." (See Schembri at column 11, lines 19-23). Additionally, Applicant argues that the Schembri apparatus necessitates one of skill in the art, in order to inject fluid inside the chamber through access port 10 or 10', to pierce through the septum 11 or 11' placed in the guides 12 or 12'.

Accordingly, Applicant argues that each and every feature of the claim as arranged in the Applicant's Claim 1 is not taught or disclosed by the cited prior art reference and hence a *prima facie* case of anticipation has not been made. For that reason, Applicant's base Claim 1, and hence dependent Claims 2 and 3, are patentably distinct over the Schembri reference under 35 U.S.C. § 102(e) and the rejection should be removed.


CONCLUSION

Based upon the above amendments, remarks, and papers of records, Applicant believes the pending claims of the above-captioned application are in allowable form and patentable over the prior art of record. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Applicant believes that a 2 month extension of time is necessary to make this Reply timely. Should applicant be in error, applicant respectfully requests that the Office grant such time extension pursuant to 37 C.F.R. § 1.136(a) as necessary to make this Reply timely, and hereby authorizes the Office to charge any necessary fee or surcharge with respect to said time extension to the deposit account of the undersigned firm of attorneys, Deposit Account 03-3325.

Please direct any questions or comments to Joanne N. Pappas at 978-635-2289

Respectfully submitted,



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